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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER
	7

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/087,141	Fuchs et al
Examiner	**Group Art Unit**
Samuel A. Turner	2877

☐ Responsive to communication(s) filed on _____ .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

X Claim(s) *1-46* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

X Claim(s) *1-46* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

X See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

X Notice of References Cited, PTO-892

X Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

X Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Office Action

The title of the invention is not descriptive. A new title is required that is clearly indicative of the **invention** to which the claims are directed.

Rejections Under Double Patenting

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel,* 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum,* 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi,* 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman,* 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13, 15-19, 21-34, and 45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8, and 25 of U.S. Patent No. 5,734,470. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations in Rogers(470) have a scope which includes all the limitations in the above rejected claims of the instant application while the above claims fail to provide any means or steps which distinguish from the Rogers(470) claims. Note that the above claims of Rogers(470) are not limited to collinear excitation and probe beams which is cited in

Rogers claim 9.

Claims 1-13, 15-19, 21-34, and 45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22, and 19-33 of U.S. Patent No. 5,812,261. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations in Nelson have a scope which includes all the limitations in the above rejected claims of the instant application while the above claims fail to provide any means or steps which distinguish from the Nelson claims. For example, Nelson claims "exciting time dependent acoustic waveguide modes in the sample by directing two time coincident laser pulses onto a sample" in claim 15, or the optical system of claim 16 neither of which claims diffracting the excitation beam as found in the instant application's claims. However, diffracting the excitation beam is covered by the scope of the Nelson claims and is disclosed in Nelson as the way the excitation beam is divided into two pulses.

Rejections Under 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 15-19, 21, 23-34, and 45 are rejected under 35 U.S.C. § 102(b) as

being clearly anticipated by Rogers et al(5,546,881).

Rejections Under 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 14, 20, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogers et al(5,546,881).

Rogers et al teach determining the mechanical properties of a film comprising a pulsed excitation light source, diffracting mask, focusing lens, pulsed probe source, focusing lens, and detector. The thickness of the film can also be determined in the fitting algorithm, See column 12, lines 17-19. See column 13, lines 34+, column 15, lines 54+, and column 19, lines 36+ device limitations. Not taught is at least two photodiodes at the detector, an interferometer detector, or a

lens pair to focus the two excitation beams onto the sample.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rogers device by providing a detector array in place of the single photodiode detector because an array would detect all the scattered probe beam. The use of an interferometer as the probe detector would also have been obvious since the use of an interferometer was well known to the skilled artisan at the time of invention. See page 21, lines 13+ of the instant application. Finally, the number of lenses used to focus the excitation pulses onto the sample would have been a mere choice of optical design thus the use of a lens pair over the lens taught would not provide a criticality over Rogers et al.

Claims 35-44, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogers et al(5,546,881) as applied to claims 14, 20, and 22 above, and further in view of Nelson et al(Journal of applied Physics 2/1982).

Rogers fails to teach a detector which detects part of the excitation beam. Nelson et al teach the use of a detector to synchronize the two pockels cells. See figure 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Roger device with a detector of synchronize the excitation and probe pulses because if the probe pulse is not present during the time-dependent ripple formed by the crossed excitation beams then no measurement is possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A. Turner those telephone number is (703) 308-4803.

The fax phone number for this Group is (703) 308-7722. The faxing of papers related to this application must conform with the notice published in the Official Gazette, 1096 O.G. 30 (15 November 1989).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Samuel A. Turner
Primary Examiner
Art Unit 2877

SAT
September 30, 1999